<u>**IN THE CLAIMS**</u>:

A complete listing of the claims is set forth below. Please amend the claims as follows:

1 - 46   **(Canceled)**

47.   **(Currently Amended)** A computer graphical user interface system comprising one or more <u>computer-readable</u> memory units, the system comprising:

a database ~~operable to~~ <u>that</u> store<u>s</u> hierarchically organized data ~~associated with~~ <u>of</u> a multi-dimensional hierarchy of data; [[and]]

a multi-dimensional graphical user interface coupled [[to]] <u>with</u> the database and ~~capable of~~ <u>providing</u> user interaction ~~to provide~~ <u>of</u> a multi-dimensional user interactive graph comprising:

a multi-dimensional axes data hierarchy including a top layer hierarchy ~~associated with~~ <u>of</u> a first axis dimension, a top layer hierarchy ~~associated with~~ <u>of</u> a second axis dimension, and a top layer hierarchy ~~associated with~~ <u>of</u> a third axis dimension;

a unique bottom layer hierarchy including a plurality of function values ~~associated with~~ <u>of</u> each of the top layer hierarchies of the multi-dimensional axes data hierarchy; [[and]]

a first wall graphical user interface grid ~~associated with~~ <u>of</u> a mathematical summarization of the plurality of function values ~~associated with~~ <u>of</u> each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension; and

<u>a second wall graphical user interface grid of the mathematical summarization of the plurality of function values of each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the second wall graphical user interface grid perpendicular with the second axis dimension; and</u>

a multi-dimensional value hierarchy ~~associated with~~ <u>of</u> each of the function values of the multi-dimensional axes data hierarchy.

48. **(Currently Amended)** The computer graphical user interface system according to Claim 47, wherein the multi-dimensional axes data hierarchy further comprises:

a plurality of levels of hierarchies ~~associated with~~ of the top layer hierarchy, and the unique bottom layer hierarchy ~~associated with~~ of each of the plurality of levels of hierarchies.

49. **(Canceled)**

50. **(Currently Amended)** The computer graphical user interface system according to Claim 48, wherein the user ~~is capable of filtering~~ filters at least a portion of the plurality of levels of hierarchies and in response the filtered levels of hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered levels of hierarchies in a separate filtered window.

51. **(Currently Amended)** The computer graphical user interface system according to Claim 50, wherein the multi-dimensional graphical user interface allows for a user navigation of the multi-dimensional axes data hierarchy by drilling into the top layer hierarchies ~~associated with~~ of each of the axis dimensions.

52. **(Previously Presented)** The computer graphical user interface system according to Claim 47, wherein the multi-dimensional graphical user interface allows for each of the function values to be graphed over user selectable aggregations of user input data.

53. **(Currently Amended)** The computer graphical user interface system according to Claim 52 wherein each of the function values are hierarchically arranged numbers and the user ~~is capable of filtering~~ filters at least a portion of the multi-dimensional value hierarchies and in response the filtered value hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered value hierarchies in a separate filtered legend window.

54.   **(Previously Presented)** The computer graphical user interface system according to Claim 53, wherein each of the function values of the multi-dimensional value hierarchy provide for user interaction of complex mathematical combinations of the multi-dimensional axes data hierarchy selected from the group consisting of: summation; average; minimum; and maximum.

55.   **(Currently Amended)** A computer software product having a computer-readable memory with control logic stored therein that provides ~~for providing~~ a computer graphical user interface, ~~the software being embodied in a computer-readable storage medium and when executed operable to~~ the control logic comprising:

a first computer readable program code that stores hierarchically organized data ~~associated with~~ of a multi-dimensional hierarchy of data in a database and display the multi-dimensional hierarchy of data to a user; [[and]]

a second computer readable program code that provides a multi-dimensional graphical user interface coupled [[to]] with the database and providing ~~capable of~~ user interaction ~~to provide~~ of a multi-dimensional user interactive graph comprising:

a multi-dimensional axes data hierarchy including a top layer hierarchy ~~associated with~~ of a first axis dimension, a top layer hierarchy ~~associated with~~ of a second axis dimension, and a top layer hierarchy ~~associated with~~ of a third axis dimension;

a unique bottom layer hierarchy including a plurality of function values ~~associated with~~ of each of the top layer hierarchies of the multi-dimensional axes data hierarchy; [[and]]

a first wall graphical user interface grid ~~associated with~~ of a mathematical summarization of the plurality of function values ~~associated with~~ of each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension; and

a second wall graphical user interface grid of the mathematical summarization of the plurality of function values of each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the second wall graphical user interface grid perpendicular with the second axis dimension; and

a multi-dimensional value hierarchy ~~associated with~~ of each of the function values of the multi-dimensional axes data hierarchy.

56.   **(Currently Amended)** The ~~computer~~ software <u>product</u> of Claim 55, wherein the multi-dimensional axes data hierarchy further comprises:

a plurality of levels of hierarchies ~~associated with~~ <u>of</u> the top layer hierarchy, and the unique bottom layer hierarchy ~~associated with~~ <u>of</u> each of the plurality of levels of hierarchies.

57.   **(Canceled)**

58.   **(Currently Amended)** The ~~computer~~ software <u>product</u> of Claim 56, wherein the user ~~is capable of filtering~~ <u>filters</u> at least a portion of the plurality of levels of hierarchies and in response the filtered levels of hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered levels of hierarchies in a separate filtered window.

59.   **(Currently Amended)** The ~~computer~~ software <u>product</u> of Claim 58, wherein the multi-dimensional graphical user interface allows for a user navigation of the multi-dimensional axes data hierarchy by drilling into the top layer hierarchies ~~associated with~~ <u>of</u> each of the axis dimensions.

60.   **(Currently Amended)** The ~~computer~~ software <u>product</u> of Claim 55, wherein the multi-dimensional graphical user interface allows for each of the function values to be graphed over user selectable aggregations of user input data.

61.   **(Currently Amended)** The ~~computer~~ software <u>product</u> of Claim 60, wherein each of the function values are hierarchically arranged numbers and the user is capable of filtering at least a portion of the multi-dimensional value hierarchies and in response the filtered value hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered value hierarchies in a separate filtered legend window.

62.   **(Currently Amended)** The <u>computer</u> software <u>product</u> of Claim 61, wherein each of the function values of the multi-dimensional value hierarchy provide for user interaction of complex mathematical combinations of the multi-dimensional axes data hierarchy selected from the group consisting of: summation; average; minimum; and maximum.

63.   **(Currently Amended)** A computer-implemented method for providing a computer graphical user interface, comprising ~~the steps of~~:

storing by a computer hierarchically organized data ~~associated with~~ of a multi-dimensional hierarchy of data in a database; [[and]]

providing by the computer a multi-dimensional graphical user interface coupled [[to]] with the database and providing ~~capable of~~ user interaction ~~to provide~~ of a multi-dimensional user interactive graph comprising:

a multi-dimensional axes data hierarchy including a top layer hierarchy ~~associated with~~ of a first axis dimension, a top layer hierarchy ~~associated with~~ of a second axis dimension, and a top layer hierarchy ~~associated with~~ of a third axis dimension;

a unique bottom layer hierarchy including a plurality of function values ~~associated with~~ of each of the top layer hierarchies of the multi-dimensional axes data hierarchy; [[and]]

a first wall graphical user interface grid ~~associated with~~ of a mathematical summarization of the plurality of function values ~~associated with~~ of each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension; and

a second wall graphical user interface grid of the mathematical summarization of the plurality of function values of each of the top layer hierarchies of the multi-dimensional axes data hierarchy, the second wall graphical user interface grid perpendicular with the second axis dimension; and

a multi-dimensional value hierarchy ~~associated with~~ of each of the function values of the multi-dimensional axes data hierarchy.

64.   **(Currently Amended)** The method of Claim 63, wherein the multi-dimensional axes data hierarchy further comprises:

a plurality of levels of hierarchies ~~associated with~~ of the top layer hierarchy and the unique bottom layer hierarchy ~~associated with~~ of each of the plurality of levels of hierarchies.

65.   **(Currently Amended)** The method of Claim 64, further comprising ~~the steps of~~:

filtering at least a portion of the plurality of levels of hierarchies and in response the filtered levels of hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered levels of hierarchies in a separate filtered window; and

navigating the multi-dimensional axes data hierarchy by drilling into the top layer hierarchies ~~associated with~~ <u>of</u> each of the axis dimensions.

66.   **(Currently Amended)** The method of Claim 63, further comprising ~~the steps of~~:

allowing each of the function values to be graphed over user selectable aggregations of user input data;

filtering at least a portion of the multi-dimensional value hierarchies and in response the filtered value hierarchies disappear from the multi-dimensional user interactive graph and the multi-dimensional graphical user interface displays the filtered value hierarchies in a separate filtered legend window; and

providing for user interaction of complex mathematical combinations of the multi-dimensional axes data hierarchy.

67-72. **(Canceled)**